

CLAIMS

1. A distributed processing system including a plurality of computer systems, comprising:
 - a means for sharing respective operating information of the computer systems;
 - a means for pointing an optimization of an execution priority of a job given to one of the computer systems and an execution term;
 - a means for forecasting an execution completed date of the given job and forecasting again the execution completed date of the job in the execution priority that is altered in response to a forecasted result; and
 - a means for assigning the job execution to other computer systems that share the operating information in response to the forecasted result.
2. A distributed processing system according to claim 1, wherein the means for forecasting an execution completed date of the job executes a forecast based on forecasted results by a means for forecasting the job executed now and a means for forecasting a time required until a wait-for-execution job is completed.
3. A distributed processing system according to claim 1 or claim 2, further comprising a means for selecting similar jobs to the given job from execution history data; and wherein the execution completed date of the job is forecasted by referring the execution history data of the selected similar job.
4. A distributed processing system according to claim 1 or claim 2, wherein the means for forecasting the execution completed date of the job forecasts the execution completed date of the given job by referring the execution history data of the pointed similar job when a user points the similar job which is similar to the given job and whose execution is completed in a past.
5. A distributed processing system according to claim 1 or claim 2, further comprising a means for inputting an execution time predicted value of the given job; and wherein the means for forecasting the execution completed date of the job forecasts the execution completed date of the given job by referring the execution time predicted value.

6. A distributed processing system according to any one of claim 1 to claim 5, further comprising an accounting means for adjusting a unit cost of time in a charge for using the computer for the job in response to an altered degree of the execution priority of the job.

7. A distributed processing system according to claim 6, wherein the accounting means increases the unit cost of time in the charge for using the computer for the job when the execution priority of the job is pulled up.

8. A distributed processing system according to claim 6, wherein the accounting means lowers the unit cost of time in the charge for using the computer for the job whose execution priority is pulled down when the execution priority of other job is pulled down to pull up the execution priority of the given job.

9. A distributed processing system according to claim 8, wherein the charge for using the computer is decided to cancel out a decreased amount of the charge for using the computer for the job whose execution priority is pulled down and an increased amount the charge for using the computer for the job whose execution priority is pulled up.

10. A distributed processing system according to any one of claim 1 to claim 9, wherein the means for forecasting the execution completed date of the job forecasts the execution completed date obtained when the job is executed by other computer systems by referring the operating information when a prediction to an effect that the job is completed within the pointed execution term is not derived by altering the execution priority of the given job.

11. A distributed processing system according to any one of claim 1 to claim 5, further comprising an accounting means for executing an accounting process by referring the operating information with regard to the charge for using the computer decided by other computer systems when the job given to one computer system is executed by the other computer systems.

12. A distributed processing system according to any one of claim 1 to claim 11, further comprising a means for offering a forecasted result of a shortest completed date of the job and a unit cost of time in the charge for using the

computer corresponding to the forecasted result when a prediction to an effect that the given job is completed within the pointed execution term is not derived.

13. A job distributed processing method using a plurality of computer systems that share operating information mutually, comprising:

- a step of giving a job to one of the computer systems by pointing an optimization of an execution priority of a job and an execution term;

- a step of forecasting an execution completed date of the given job;

- a step of altering an execution priority of the job in response to a forecasted result;

- a step of forecasting the execution completed date of the job after execution priority of the job is altered; and

- a step of assigning the job execution to other computer systems that share the operating information in response to the forecasted result.

14. A job distributed processing method according to claim 13, wherein the step of forecasting an execution completed date of the job executes a forecast based on the job being executed now and a time required until a wait-for-execution job is completed.

15. A job distributed processing method according to claim 13, further comprising:

- a step of selecting similar jobs to the given job from execution history data; and

- a step of forecasting the execution completed date of the job by referring the execution history data of the selected similar job.

16. A job distributed processing method according to claim 13, further comprising:

- a step of pointing the similar job which is similar to the given job and whose execution is completed in a past by a user; and

- a step of forecasting the execution completed date of the given job by referring the execution history data of the pointed similar job.

17. A job distributed processing method according to claim 13, further comprising:

a step of inputting an execution time predicted value of the given job by a user; and

a step of forecasting the execution completed date of the given job by referring the execution time predicted value.

18. A job distributed processing method according to claim 13, further comprising a step of adjusting a unit cost of time in a charge for using the computer for the job in response to an altered degree of the execution priority of the job.

19. A job distributed processing method according to claim 13, further comprising a step of increases the unit cost of time in the charge for using the computer for the job when the execution priority of the job is pulled up.

20. A job distributed processing method according to claim 13, further comprising a step of lowering the unit cost of time in the charge for using the computer for the job whose execution priority is pulled down when the execution priority of other job is pulled down to pull up the execution priority of the given job.

21. A job distributed processing method according to claim 13, further comprising a step of deciding the charge for using the computer to cancel out a decreased amount of the charge for using the computer for the job whose execution priority is pulled down and an increased amount the charge for using the computer for the job whose execution priority is pulled up.

22. A job distributed processing method according to claim 13, further comprising a step of forecasting the execution completed date obtained when the job is executed by other computer systems by referring the operating information when a prediction to an effect that the job is completed within the pointed execution term is not derived by altering the execution priority of the given job.

23. A job distributed processing method according to claim 13, further comprising a step of executing an accounting process by referring the operating information with regard to the charge for using the computer decided by other

computer systems when the job given to one computer system is executed by the other computer systems.

24. A job distributed processing method according to claim 13, further comprising a step of offering a forecasted result of a shortest completed date of the job and a unit cost of time in the charge for using the computer corresponding to the forecasted result when a prediction to an effect that the given job is completed within the pointed execution term is not derived.

25. A program for selecting an optimum computer from a plurality of computer systems to cause the computer to execute a given job, for causing a computer to function as

- a means for sharing respective operating information of the computer systems,

- a means for forecasting an execution completed date of the given job by pointing an optimization of an execution priority and an execution term, and forecasting again the execution completed date of the job in the execution priority that is altered in response to a forecasted result, and

- a means for assigning the job execution to other computer systems that share the operating information in response to the forecasted result.

26. A program according to claim 25, further causing the computer to function as a means for forecasting an execution completed date of the given job based on forecasted results of the job executed now and a time required until a wait-for- execution job is completed.

27. A program according to claim 25 or claim 26, further causing the computer to function as a means for selecting similar jobs to the given job from execution history data, and a means for forecasting the execution completed date of the job by referring the execution history data of the selected similar job.

28. A program according to claim 25 or claim 26, further causing the computer to function as a means for forecasting the execution completed date of the job forecasts the execution completed date of the given job by referring the execution history data of the pointed similar job when a user points the similar job which is similar to the given job and whose execution is completed in a past.

29. A program according to claim 25 or claim 26, further causing the computer to function as a means for forecasting the execution completed date of the given job by referring the execution time predicted value.

30. A program according to any one of claim 25 to claim 29, further causing the computer to function as a means for adjusting a unit cost of time in a charge for using the computer for the job in response to an altered degree of the execution priority of the job.

31. A program according to claim 30, wherein the unit cost of time in the charge for using the computer for the job is increased when the execution priority of the job is pulled up.

32. A program according to claim 31, wherein the unit cost of time in the charge for using the computer for the job whose execution priority is pulled down is lowered when the execution priority of other job is pulled down to pull up the execution priority of the given job.

33. A program according to claim 32, wherein the charge for using the computer is decided to cancel out a decreased amount of the charge for using the computer for the job whose execution priority is pulled down and an increased amount the charge for using the computer for the job whose execution priority is pulled up.

34. A program according to any one of claim 25 to claim 29, further causing the computer to function as a means for forecasting the execution completed date obtained when the job is executed by other computer systems by referring the operating information when a prediction to an effect that the job is completed within the pointed execution term is not derived by altering the execution priority of the given job.

35. A program according to any one of claim 25 to claim 29, further causing the computer to function as a means for executing an accounting process by referring the operating information with regard to the charge for using the computer decided by other computer systems when the job given to one computer system is executed by the other computer systems.

36. A program according to any one of claim 25 to claim 35, further causing the computer to function as a means for offering a forecasted result of a shortest completed date of the job and a unit cost of time in the charge for using the computer corresponding to the forecasted result when a prediction to an effect that the given job is completed within the pointed execution term is not derived.